PRESENTATION OF REMOTE DETONATION SYSTEMS

TX68R/100 MAIN CONTROL UNIT TRANSMITTER
RX68R/100 RECEIVER
CX68/100 CHARGER
P-100 Time Delay Fuse Programmer
MO-200 Cable Initiator

Sequence of Presentation

- Introduction of TEKSAV TEKNOLOJI
- Overview of Product Range
- Detailed Presentation of Remote Detonation System TX68R/100, RX68R/100
- Demonstration of Remote Detonation Systems

OUR PRODUCTS

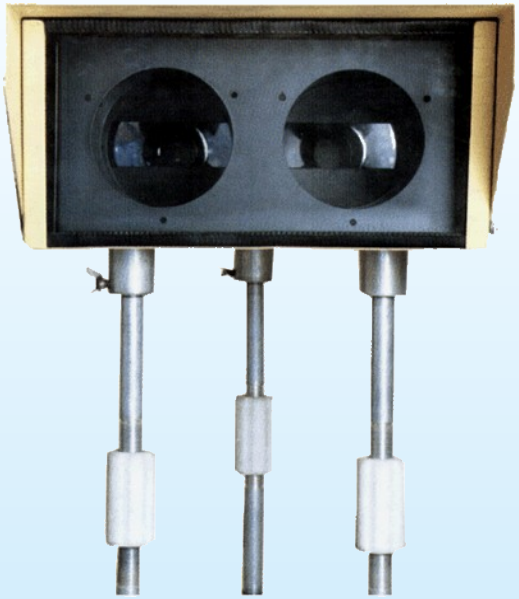
- DEFENCE
- AVIATION
- SOFTWARE
- EDUCATION & TRAINING
- OTHERS

AIRFIELD LIGHTING SYSTEMS

Sequence Flashing Lighting System

SFLS-3 and SFLS-1 are electronically controlled sequence flash lighting systems which guide the pilot during approach and landing.

Precision Approach Path Indicator (PAPI)

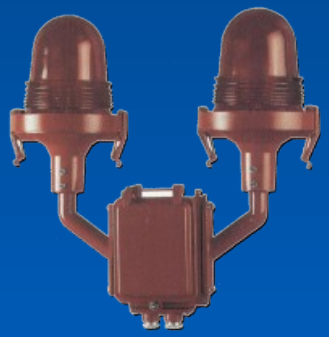


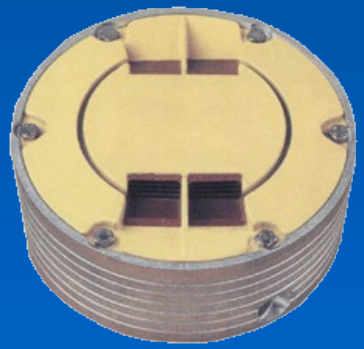
PAPI used in the stationary and mobile installations to give the pilot approach slope indication

AIRFIELD LIGHTING SYSTEMS

Runway

CCR



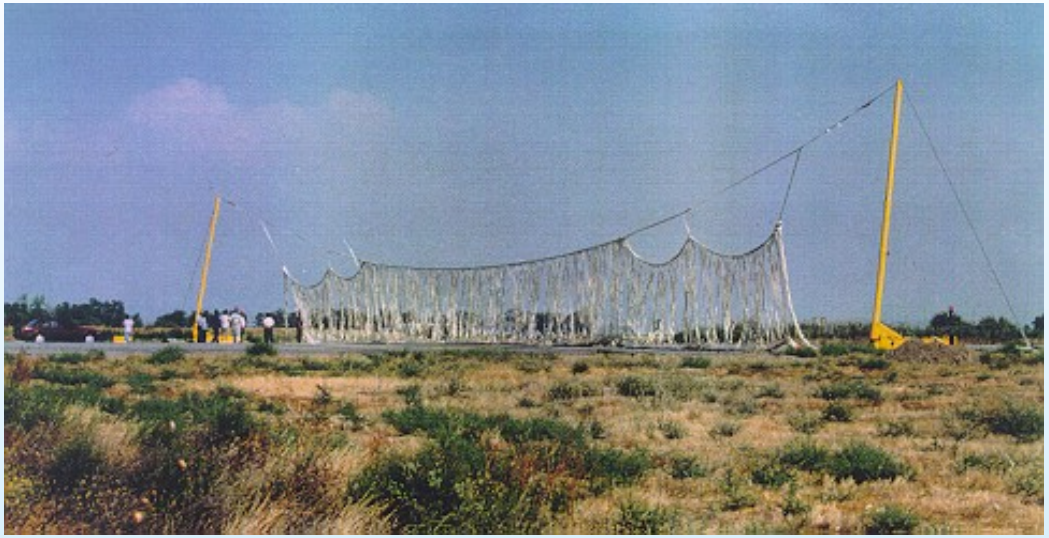


Inset lights

Taxiway

AIRCRAFT ARRESTING BARRIERS

The system is used at military airfields to arrest aircrafts that cannot be safely stop at the end of the runway during take on or take off due to the brake failure or any other emergency situations.



Aircraft Arresting Net Barrier consists of AT-AB/1 Stanchion System and TT-30 Net Barrier.

- **The Barrier coupled with 12-3F, 500-S and BAK-12 and textile type brake systems, can arrest y aircraft up to 60,000 lbs traveling at a maximum velocity of 190 knots during landing.**
- **AT-AB/1 is compatible with 1-28, T-30 and F-40 type nets as well.**
- **The system can be activated in 1,5 seconds and could be also raised and lowered at least 5 times by battery power backup if the mains cut off.**

GROUND SUPPORT EQUIPMENTS

Mobile Floodlighting Tower

Hydraulic mast, rotation of the lighting head on horizontal and vertical axis via joystick control, six 1000 watt halogen lamps of YTE-ARL-16 H Mobile Floodlighting Tower saves the night from darkness whenever and wherever is needed.

GROUND SUPPORT EQUIPMENTS

Ground Power Unit

GPU-15 is designed to generate and deliver 28.5 volts DC power to an aircraft when its on-board generators are shut down. In addition to providing continuous, related power to the aircraft, the unit is also designed for starting any fixed-wing aircraft or helicopter which is equipped with an external 28.5 volts DC power receptacle.

GROUND SUPPORT EQUIPMENTS

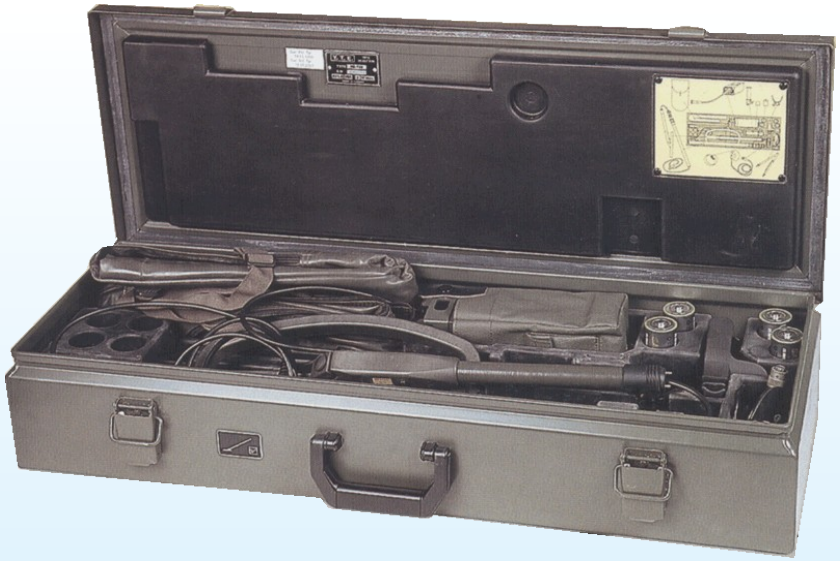
Nitrogen Service Unit

Supplies nitrogene to the aircraft.

COMPUTERIZED WIRELESS TARGET SCORING SYSTEM (BITEG-99)

BITEG-99 System is designed and produced to train staff of the tank on shooting in an alley that included wireless target system.

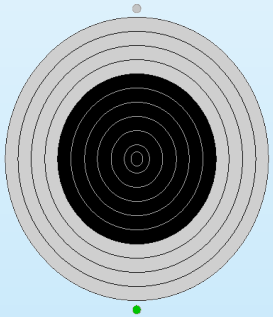
MINE DETECTOR (MD-720)



MD-720 Detector having a high scanning performance and detection sensitivity is produced specially for military applications. The latest technology of control used in MD-720 allows detection of anti-personnel mines, bombs and metals either on or below the ground.

Pulse induction.

INTERACTIVE SHOOTING TRAINER & SIMULATOR



AES-800 / TANUS 2004 is the most effective and economic training systems in order to increase the capabilities and efficiency of military forces, civil & public security forces, special forces and anti-terror teams.

WIND CONE & DISTANCE MARKER

Illimunated Wind Cone

It provides visual surface wind direction and velocity information to pilots in flight or on the ground at airports and heliports.

An **L-810** steady-burning red obstruction light, mounted on top of the wind cone mast is included with the lighted wind cone assemblies.

The lighted wind cone assemblies may be powered from a 6.6A or 20A series circuit using .

Cone dimension
L : 8 feet (245 cm)
Q : 18 inches(46 cm)

Runway Distance Markers

It shows the pilots remaining length of ru-nway.

- Polyester body, aluminum or wooden frame and poles
- Reflective white legend panel on black background
- Maximum safety in case of accidental impact with its fragile poles
- Illuminated with CCR's circuit 6.6 A or 220 VAC Pk30d halogen or fleuresant type.

TIME DELAY FUSE PROGRAMMER

- The P-100 is programmer for the time delays fuses with an easy man machine interfacing
- 2 lines by 16 character LCD display with a backlight
- The D-100 Operational Fuse Operates in the most demanding climatic environment and underwater to a depth of up to 30 meters.\
- D-100 can be programmed by time mode up to 100 hours and by date up to 10 years

CABLE INITIATOR

- This cable initiator kit (MO-200 / SO-200) offers full package of material and instruments needed by the EOD teams.
- Automatic measurement and indication of line resistance.
- State of the art electronic mico controller tecnology is employed.
- Ability to detonate with 200m cable

Business Development in Indonesia

- PT. Solindo Global – A key partner for business development in Indonesia
- Look forward for a sustainable long term relationship with our brotherly countries

Projects in Indonesia

- ATC Air traffic control tower
- Aircraft arresting barrier systems
- Remote detonation systems

REMOTE DETONATION SYSTEMS

TX68R/100 W RX68R/100 W

RX68-TX68

2010

Presented by: Dr. S. Akdurak

TEKSAV teknoloji A.S Izmir/TURKEY

Local Representatives: PT. Solindo Global**, jakarta , Indonesia**

Technology

- State of the art technology being used
  - **SMT (surface mounted technology)**
  - **high reliability components applied**
- Well proven system around the world
  - **Over 1200 systems in operation**
- Standards applied
  - **NATO standards (STANAG)**
  - **MIL-STD-810,MIL-STD-461,MIL-STD-462**
- ISO9001 quality assurance scheme is applied

MAIN FEATURES

- MODULAR DESIGN
  - **MTTR =< 12 minutes quick servicing**
- MTBF = 25973 hours/failure
  - **Service hours=(number of units shipped 1030)*(work hours per day 6 hours/day)*(installment rate 85%/100)*(sampling period 89 days)= 467517 hours .**
  - **MTBF= Service hours (467517) /number of failures (18)= 25973 hours/failure**

- Compliance with military standards MIL-STD-810F, 461E, 464 and NATO STANAG 4234.
- Light weight and rugged design
- All our production is accredited by ISO9001
- All materials and production components are warranted against defective workmanship for 12 months from date off purchase.
- Combat proven by Turkish army and other organizations around the globe

OUR ISO9001 mottos

- Customer satisfaction
  - **We listen our customers carefully**
  - **We give utmost care for the requirements of our customer**
  - **We support fully for the logistics of our customers with after sales services**
- ISO9001-2008 mandates economical but high quality production

LAND VERSION TX68 / RX68

- Basic version
- No Screen
- No Reply Back
- Easy To Use
- Code Selection is done by selector switches

TX68R-100/RX68R-100

Optical path

RS232

PC Optical path

RS232

RF

Link

RX68R/100
land versions

RX68R/100-1
one output

RX68R/100-10
Ten outputs

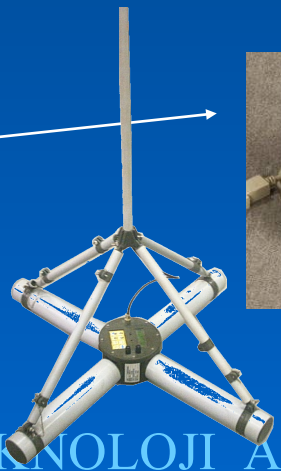
TX68R/100

RX68R/100W

Hard Wired com.

Twisted pair cable

up to 1500 mtrs



Sea version
RX68R/100S with pipe floater

Specifications

- The modules – receivers & transmitter operates at:
  VHF band (173 MHz)
  UHF 433 MHz, 980 MHz and 1600 MHz
- TX68R/100 and RX68R/100 have mainly 4 different possibilities as explained in the table.1 below

	Frequency	Possible freq.
TX68R/100	Single	173 MHz
TX68R/100-16	16 channels user selectable	433 MHz or 868 MHz
TX68R/100-FHSB	Frequency hopping single band	433 MHz or 868 MHz
TX68R/100-FHDB	Frequency hopping dual band for TX or RX	433 MHz 868 MHz

Salient Features

- System serves as the remote initiation of a number of devices positioned at the target site.
- System can be operated in either Manual or Auto-Fire modes (in groups or sequencing)
- By using the Global command all RX68R/100 receiver modules on a selected address can be fired simultaneously.
- RX68R/100 has 2X16 lines LCD with backlight.
- TX68R/100 has 4x20 lines is available with LCD or Graphical LCD with backlight.
- Menu driven software allows easy and well secured operation.
- Hardwired logic electronic timer is applied as safety arming device. Optional mechanical arming timer is available.
- Extremely easy programming, no need for long training.

…….. Salient Features

- The System includes full manual and automatic test functions and can be remotely interrogated from the Control Unit TX68R/100 to confirm the output firing line continuity, arming condition and battery status.
- All units have automatic power shutdown (Silent mode) facility to save the batteries and increase on time.
- The System can be configured with two types of modules. Receiver detonator modules are available.

  RX68R/100-1 single output

  RX68R/100-10 ten output channels
- The Security code is transformed such a complex structures that it is almost impossible to decode.
- Also unique higher level encrypted coding is also integrated and easily is selected by the user.

…….. Salient Features

- TX68R/100 Remote Controlled Firing System can easily be operated up to 25 kilometer's in an open area. (In line of sight). Ground to ground typically 2-5 Kms depending on the environmental and structural conditions.
- All modules have BIT (Built in Test) function. In case of failure that will prevent misfiring.

- Modules can be connected to any Personal Computer PC via optical RS232 serial line for;
  - **Programming (RDSP software free of charge)**
  - **Firing history**
  - **Testing**
  - **Servicing**

…….. Salient Features

- Due to the low power consumption RX68R/100, it can operate 10 days in silent mode without any need to replace or charge the batteries.
- Detonator modules capable of driving up to 100 meter long firing cable because of its high power output.
- Each output channel can detonate up to 10 fuzes.
- Standard Accessories:
  - **Aluminum rugged carrying case with polyurethane padding pockets**
  - **Two different Antennas.**
  - **Fast battery charger CX68/100 and battery pack**
  - **User Manual**
  - **Service manual**

SOFTWARE+HARDWARE ADVANTAGES

- User friendly menu driven system
  - **Different levels of usage**
  - **Large font graphic LCD display**
  - **By optical port connection all can be prepared before hand**
- In house development
- Future promising past performance
- Frequency hoping (single,double band)
- Sea version Unique pipe floater (for range extension)
  - **Easy to carry and store**
  - **High stability**

RF facts with figures (Worst case OKUMURA)

Output Power (W)	Antenna height (m)	Range (kms) Urban 433 Mhz	Range (kms) Rural 433 Mhz	Range (kms) Urban 173 Mhz	Range (kms) Rural 173 Mhz
0.5 0.5	1m 1m 3m 3m	0.3 0.6	1.4 3	0.6 1.1	2.2 4.1
2 2	1m 1m 3m 3m	0.5 0.9	1.9 3.7	0.7 1.5	3.0 5.8
7 7	1m 1m 3m 3m	0.6 1.2	2.6 5.1	1.1 2.1	4 7.8

After 30 Mhz RF has quasi optical behavior LOS

OPTIONS

- R option is Reply back

  (back and forward interrogation)
- W option is for hardwired operation
- S option is for sea version
- 1 - 5 - 10 -12 number of output channels
- G option is for Global positioning namely GPS
- L option is for listening the surrounding

Contact Points

TEKSAV Teknoloji a.s

Tel: 0090-232-3281141

Fax:0090-232-3281147

E-mail: yteder@gmail.com

info@teksav-teknoloji.com

www.teksav-teknoloji.com

– **Local Rep: PT. Solindo Global**

Jl. Pemuda, Komplek Taman Berdikari Sentosa C2/2 Jakarta 13220 – INDONESIA

We Thank you